

Table 10. Nature and Extent of Soil to be Remediated, Park Soil Pre-Design Sampling, Northrop Grumman Systems Corporation, Operable Unit 3 (Former Grumman Settling Ponds), Bethpage, New York.

Area	Parameter	Remedial Depth Interval (ft bls)	Remedial Action Objectives (mg/kg) <sup>(2)</sup>		Nature and Extent of Soils to be Remediated (2)	Impacted <sup>(3)</sup> Volumes (cy)
Ball Field - PCB Removal Area <sup>(1)</sup>	PCBs	0-2	1		• There are three, depth-specific RAOs for PCBs in the ball field • The areal extents of PCB impacts that exceed the 0-2, 2-10, and >10 foot remedial depth interval RAOs are shown on Figures 5A and 5B.	3,500
		2-10	1 1(1)			10,100
		10-25	50			4,200
	Chromium Sludge	0-25	Remove chromium sludge co-located with PCB-impacted soil to extent necessary to achieve PCB RAOs		Discrete pockets co-mingled with PCB-impacted Park Soils.	(4)
	Metals <sup>(5)</sup>	0-10	Chromium	180	• The areal extents of metal impacts that exceed the 0-2 and 2-10 foot remedial depth interval RAOs are shown on Figures 7A and 7B.	(4)
			Cadmium	4.3		
			Arsenic	16		
Ball Field - Outside of PCB Removal Area	Metals <sup>(5)</sup>	0-2	Chromium	180	The areal extents of metal impacts that exceed RAOs are shown on Figures 7A and 7B.	300
			Cadmium	4.3		
			Arsenic	16		
Access Road	PCBs	0-2	1		<ul> <li>There are two, depth-specific RAOs for PCBs in the Access Road.</li> <li>The areal extents of PCB impacts that exceed the 0-2 and 2-10 ft remedial depth interval RAOs are shown on Figure 5A and 5B.</li> </ul>	3,300
		2-10	10			500
	Chromium	0-2	180		The areal extents of chromium impacts that exceed RAOs are shown on Figures 7A and 7B.	300
Eastern Portion of Park	PCBs, Metals <sup>(5)</sup>	0-2	PCB	1	• The areal extent of PCBs and metals impacts that exceed RAOs are shown on Figures 5B and 7B, respectively	2,000
			Chromium	180		
			Cadmium	4.3		
			Arsenic	16		
					Combined Total	24,200

## Notes:

PCB Removal Area – area within the ball field (defined laterally & vertically) where soil will be remediated to achieve the following PCB RAOs: greater than 1 mg/kg from 0 to 2 feet, greater than 10 mg/kg from 2 to 10 feet, and greater than 50 mg/kg from 10 to 25 feet.

(2) Clean Up Criteria and RAOs provided in the NYSDEC-issued OU3 ROD dated March, 2013.

(3) Volumes of impacted soils were estimated for the sub-areas from EVS modelling conducted by ARCADIS. Volumes are rounded up to the next hundred cubic yards.

(4) These volumes are included in the PCB impacted volumes.

(5) Metals include cadmium, chromium and arsenic.

## Acronyms:

cy cubic yards

ft bls feet below land surface

metals Includes one or more of the following: arsenic, cadmium, and chromium

mg/kg milligrams per kilogram

NYSDEC New York State Department of Environmental Conservation

OU3 Operable Unit 3

PCBs polychlorinated biphenyls RAOs Remedial Action Objectives

ROD Record of Decision